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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,467	01/04/2006	Sergio Martins Costa	10008.010	1361
<div>7590      10/04/2007</div> <div>Christopher J Fildes Fildes &amp; Outland PC Suite 2 20916 Mack Avenue Grosse Pointe Woods, MI 48236</div> <div>EXAMINER MANOHARAN, VIRGINIA</div> <div>ART UNIT      PAPER NUMBER</div> <div>1764</div> <div>MAIL DATE      DELIVERY MODE</div> <div>10/04/2007      PAPER</div>				

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/563,467

Applicant(s)

COSTA, SERGIO MARTINS

Examiner

Virginia Manoharan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, for examples only: "the third floating head" recited e.g., in claim 7; "a second floating head on the third bottom tubesheet" in claim 6; "a second vapour chamber above the third upper tubesheet" in claim 6, must all be shown or the features canceled from the claims. No new matter should be entered. [Applicant should check the claimed apparatus such that all claimed elements or devices must be shown with, corresponding reference numerals, in the drawings].

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The amendment filed July 11, 2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows, for examples only: The negative proviso: "... The solution to have a compact vessel containing the whole stages, without having a vertical stack.." (page 4), and further in the same page 4, "...inserted one inside each other, on a horizontal base". Note also the recited advantages using rising film evaporators, presently amended in page 4, of the specification. Applicant is required to cancel the new matter in the reply to this Office Action. However, if not deemed to be new matter by applicant, the specification is objected to instead, as failing to provide proper antecedent basis for the above claimed subject matter as they are not positively recited in the specification. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

Claims 5-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The following languages were nowhere in the specification as originally filed, for examples only: The "connected series" as claimed in the preamble of claim 5; "fourth

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evaporator"; and the "floating heads" claimed e.g., in claims 5-7. However, if support can be pointed- out, the specification fails to provide proper antecedent basis for the above claimed subject matter as they are not positively recited in the specification. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

[Applicant should further check the amendments to the specification and claims. While they can be amended, care must be exercised to avoid introduction of anything which could be construed to be new matter prohibited by 35 U.S.C. 132 and 37 CFR 1.121].

Claims 5-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a). The claims are incomplete for omitting essential structural cooperative relationships of elements and/or for omitting essential elements such omissions amounting to gaps between the necessary structural connections and/or between the elements respectively. See MPEP § 2172.01. The omitted structural cooperative relationships are: the tie-in between the first and second evaporators (not positively recited in the claims). The omitted elements are: the condenser such that the "condensate" can be obtained and be directed as recited in claim 5. Also, the preamble of claim 5, recites a "distillation apparatus", however, the claim recites only an evaporator. [A distillation apparatus, by definition, is constituted of a combined evaporator and condenser devices, but the condenser is not recited in the claim].

b). The claimed "the final condenser stage of the apparatus" in claim 13 lacks antecedent support.

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- c). In claim 14, "the condenser" (singular) is at odds with "the condensers" (plural).
- d). The parenthetical statement in a claim is improper as every feature recited in a claim becomes a part of the overall subject matter. By placing terms in parenthesis renders the claims ambiguous as to whether or not these phrases should be disregarded. See (annular) in claim 5.

Claims 5-16 are objected to because of the following informalities: The claimed "vapour" should be --vapor—as the latter is the term normally used in the U.S.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a). Garabedian et al discloses a double- tube modular coil steam generator with multiplicity of inner and outer tubes.

b). Biar et al discloses a vertical falling -film shell and tube heat exchanger.

Claims 5-16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraphs, set forth in this Office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 571-272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 132/1764